National Youth Science Camp®

*The **National Youth Science Camp**® (NYSC) is an innovative and highly successful summer science honors program for two high-achieving high school science students from each state in the nation. This four-week residential experience in a rustic setting in West Virginia's eastern mountains began in 1963 and has honored and challenged 4,000 participants since then. The National Youth Science Foundation®, a nonprofit 501(c)(3) corporation, operates the National Youth Science Camp.*

Goals

- Honor high-achieving science oriented students
- Introduce new scientific topics, especially those not typically covered in traditional secondary curriculum
- Encourage lifelong learning in science, engineering, and technology
- Demonstrate relationships among the sciences and between science and other disciplines
- Prepare students to face challenges of college and career
- Encourage creativity, build self-confidence, and develop camaraderie among future leaders

NYSC Program Components

Lectures and Interactive Seminars
Prominent speakers from across North America discuss cutting-edge topics in science and other disciplines, and have ample opportunity for informal interaction with students attending the NYSC.

Directed Studies
Visiting and resident professionals from diverse fields of study conduct three-day, in-depth research investigations in lab and field studies.

Program Areas
Visiting and resident experts lead hands-on experiences in the natural science, physical science, and computer science laboratories along with co-curricular activities in arts, music, wellness and sports. The surrounding million-acre Monongahela National Forest serves as a learning resource for field studies in wildlife ecology, botany, water chemistry, scientific illustration, and other areas. Delegates may also assist researchers at the nearby National Radio Astronomy Observatory.

Delegate Lectures/Seminars
NYSC delegates are encouraged to share their own research work with their peers and with visiting and resident experts who may be specialists in that field. Past delegate research topics have ranged from airplane wings based on dragonfly anatomy to DNA sequencing to antilock brakes for mountain bikes.

Backcountry Program
Resident specialists and practicing scientists lead small-group day trips and overnight excursions into the National Forest. Adventures such as back-packing, rock-climbing, caving, mountain biking and kayaking, foster an appreciation of nature and help develop leadership and teamwork skills.

Free-Time Activities
Opportunities abound for participants to pursue personal interests on an informal basis. The Program Areas (labs, studios, athletic fields, and natural areas) are available most afternoons for individualized instruction or group projects involving fellow delegates, staff members, and visiting specialists.

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Additional Program Features

National Representation
Participants are invited from each state and Washington, DC. A small number of equally accomplished students from other countries have also attended past NYSC sessions, including delegates from Canada, France, Germany, Japan and several Latin American countries. Selection is based on science achievement and participation in school and community, and participation in the program is completely free of charge. The Foundation practices a nondiscrimination policy.

Physical Environment
NYSC facilities include science laboratories, a computer center, and arts and music studios located in West Virginia's ecologically diverse, geologically complex eastern mountains. The area provides an outstanding natural laboratory for teaching and experimentation. Isolation from the usual distractions of cities or college campuses provides a nurturing atmosphere.

Intensive and Non-Competitive Learning
The schedule offers four weeks of near "around-the-clock" learning opportunities in a challenging yet friendly setting. Noncompetitive learning encourages teamwork and cooperative skills, utilizing science as a common language to allow delegates to learn from peers, staff, and visiting experts.

Broad Exposure to New Fields of Science
The NYSC program provides a broad spectrum of natural, physical, and applied sciences including biology, physics, chemistry, geology, astronomy, environmental science, engineering, medicine, space science and technology, with additional emphases on ethics, humanities, and the arts.

Washington Visit and Senate Luncheon
Delegates travel to Washington for three days to study national science concerns in meetings with scientists and with behind-the-scenes visits to research sites such as Goddard Space Flight Center, USAMRIID, National Institutes of Health and national museums. One highlight of the Washington visit is the Senate Luncheon hosted by West Virginia Senator Robert C. Byrd and attended by the delegates' respective senators with a talk by a prominent policy-making national speaker.

Cost
The NYSC program is offered **free of charge** to all delegates. Delegates may want to bring spending money for souvenirs, snacks, incidentals and the Washington DC trip.

For more information about the NYSC, please visit our website at **www.sciencecamp.org**, or call the National Youth Science Foundation at 304-342-3326.

NYSC Staff

- Resident staff include **experienced scientists and science educators** chosen for proven success with cross-disciplinary instruction
- All staff members will be skilled in **building self-esteem and promoting respect** for others

NYSC Alumni

Many top science teachers and science and technical professionals count their experience at the National Youth Science Camp as being the strongest educational experience for providing reinforcement to pursue technical and scientific careers. Some former participants, like **David Thompson** who chairs **Orbital Science Corporation**, the first publicly owned firm to launch satellites as a business, met the father of the space program at the NYSC. **Dr. Deda Gillespie**, who went on from the science camp to earn a doctoral degree in neuroscience from the University of California at San Francisco, credits her NYSC experience with providing the direction and encouragement that she needed to excel in her field. **Dr. David Hackleman, NYSC Alumnus and NYSF Trustee,** is a **Hewlett-Packard** inventor on the team that developed Ink Jet technology, which now totals $10 billion in sales annually. David, Deda and countless others who are alumni of the National Youth Science Camp program return to West Virginia each year to teach and inspire at the NYSC. Some have been instrumental in bringing contributions and investment dollars into West Virginia, which they credit with having made a significant contribution to their professional careers. NYSC alumni tell us they would like to have an opportunity to return and help instruct West Virginia students with the same care and dedication they benefited from.